In the Specification

Please amend the specification as follows:

(1) On page 5, please amend the paragraph beginning at line 14 as follows:

To illustrate the operation of isolated boost converter 400, Figure 5 provides simplified circuit model 500 of isolated boost converter 400 of Figure 4. In simplified circuit model 500, energy-storage capacitor 406 and filter capacitor 410 are modeled by voltage sources 406a (V_B) and 410a (V_O), respectively, since capacitance value C_F of filter capacitor 410 is large enough, so that the voltage [ripple] ripples (V_r) across capacitors 410 and 406 [is] are small relative to their DC voltages. In addition, in Figure 5, isolation boost transformer 403 is modeled by leakage inductor 403a (inductance value L_{LK}), magnetizing inductor 403m (inductance value L_M), and ideal transformer 403i with a turns ratio $n=N_P/N_S$, where N_P is the number of turns in the primary winding and N_S is the number of turns in the secondary winding. In circuit model 500, all semiconductor components are assumed to have no impedance, when conducting, and infinite impedance, when not conducting.

(2) On page 7, please amend the paragraph beginning at line 27 as follows:

After time T_3, voltage source [406b] 406a is connected in opposite polarity to input voltage source 417, so that input current i_{IN} decreases linearly with the slope given by equation (1). In addition, as primary voltage V_{PRIM} across the primary windings of transformer 403 is negative (i.e., $V_{PRIM}=-V_B$), primary current i_{PRIM} (waveform 706, Figure 7(f)) also decreases linearly with a slope:

(3) On page 10, please amend the paragraph beginning at line 10 as follows:

Equation (13) shows that the voltage conversion ratio depends not [≥] only on duty cycle D of switches 402a and 403b, and turns ratio n of

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transformer 403, but also on load current I_O in load 411, as well as switching frequency f_S of switches 402a and 402b and leakage inductance L_{LK} of transformer 403.

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